CLAIMS LISTING

1.(currently amended) A stimulable phosphor screen or panel suitable for use in mammographic applications comprising a binderless phosphor layer having needle-shaped crystals, said layer not exceeding a layer thickness of 150 μm, and a support ~~characterized in that~~ wherein an intermediate layer arrangement of an X-ray absorbing foil or layer absorbing x-rays to a lower extent, and avoiding scattering to a great extent, and, farther from the support, a stimulated light reflecting foil is present between said support and said phosphor layer.

2.(previously presented) A stimulable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises an X-ray absorbing layer comprising a binder wherein said binder is a matrix of a polycondensation product of a metal alkoxide species, and an oxide or a hydroxide of lead metal is dispersed in said binder.

3.(original) A stimulable phosphor screen or panel according to claim 2, wherein said binder containing the lead compound is a matrix of an inorganic network of alkoxymetal substituted organic polymers or copolymers matrix.

4.(original) A stimulable phosphor screen or panel according to claim 3, wherein said matrix is derived from a cross-linking agent selected from the group consisting of dialkoxysilanes, trialkoxysilanes, tetraalkoxysilanes, titanates, zirconates and aluminates; and a colloid of silica, and wherein said matrix comprises a colloid of an oxide or a hydroxide of lead metal.

5.(original) A stimulable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises, as an X-ray absorbing layer a layer of lead.

6.(original) A stimulable phosphor screen or panel according to claim 1, wherein as a stimulated light reflecting foil an aluminum layer is present.

7.(original) A stimulable phosphor screen or panel according to claim 2, wherein as a stimulated light reflecting foil an aluminum layer is present.

8.(cancelled)

9.(cancelled)

10.(cancelled)

11.(original) A phosphor screen or panel according to claim 1, wherein said support is selected from the group consisting of ceramics, glass, amorphous carbon, aluminum and polymeric films.

12. (original) A phosphor screen or panel according to claim 6, wherein said support is selected from the group consisting of ceramics, glass, amorphous carbon, aluminum and polymeric films.

13. (original) A phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement has a surface that has been subjected to embossing for forming a fine concavo-convex pattern.

14. (original) A phosphor screen or panel according to claim 6, wherein said intermediate layer arrangement has a surface that has been subjected to embossing for forming a fine concavo-convex pattern.

15. (cancelled)

16. (cancelled)

17. (original) A phosphor screen or panel according to claim 1, having between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

18. (original) A phosphor screen or panel according to claim 6, having between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

19. (cancelled)

20. (cancelled)

21. (original) A phosphor screen or panel according to claim 1, having between said intermediate layer arrangement and the phosphor layer a moisture-repellent parylene layer.

22. (original) A phosphor screen or panel according to claim 6, having between said intermediate layer arrangement and the phosphor layer a moisture-repellent parylene layer.

23. (cancelled)

24. (cancelled)

25. (original) A phosphor screen or panel according to claim 1, having between said intermediate layer arrangement and the phosphor layer and between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

26. (original) A phosphor screen or panel according to claim 6, having between said intermediate layer arrangement and the phosphor layer and between said intermediate layer arrangement and the support a moisture-repellent parylene layer.

27. (cancelled)

28. (cancelled)

29. (cancelled)

30. (cancelled)

31. (cancelled)

32. (cancelled)

33. (cancelled)

34. (currently amended) A binderless stimulable phosphor screen or panel according to ~~claim 30~~ claim 1, wherein said needle-shaped phosphor crystals are crystals of an alkali metal halide phosphor.

35. (currently amended) A binderless stimulable phosphor screen or panel according to ~~claim 31~~ claim 2, wherein said needle-shaped phosphor crystals are crystals of an alkali metal halide phosphor.

36. (cancelled)

37. (currently amended) A binderless stimulable phosphor screen according to ~~claim 29~~ claim 34, wherein said alkali metal halide phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

38. (currently amended) A binderless stimulable phosphor screen according to ~~claim 30~~ claim 35, wherein said alkali metal halide phosphor is a CsX:Eu stimulable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

39. (cancelled)

40. (cancelled)

41.(cancelled)

42.(cancelled)

43.(cancelled)

44.(cancelled)

45.(new) A phosphor screen or panel according to claim 1, wherein said x-ray absorbing foil or layer has a thickness in the range of 25 to 150 μm.

46.(new) A phosphor screen or panel according to claim 2, wherein said said x-ray absorbing foil or layer has a thickness in the range of 25 to 150 μm.

47.(new) A phosphor screen or panel according to claim 5, wherein said said x-ray absorbing foil or layer has a thickness in the range of 25 to 150 μm.

48.(new) A phosphor screen or panel according to claim 6, wherein said aluminum layer has a thickness in the range of 0.5 μm to 5 μm.

49.(new) A phosphor screen or panel according to claim 7, wherein said aluminum layer has a thickness in the range of 0.5 μm to 5 μm.

50.(new) A phosphor screen or panel according to claim 1, wherein said support is a PET support having a thickness in the range from 100 μm to 1000 μm.

51.(new) A phosphor screen or panel according to claim 2, wherein said support is a PET support having a thickness in the range from 100 μm to 1000 μm.

52.(new) A phosphor screen or panel according to claim 5, wherein said support is a PET support having a thickness in the range from 100 μm to 1000 μm.

53.(new) A phosphor screen or panel according to claim 6, wherein said support is a PET support having a thickness in the range from 100 μm to 1000 μm.

54.(new) A phosphor screen or panel according to claim 7, wherein said support is a PET support having a thickness in the range from 100 μm to 1000 μm.

55.(new) A phosphor screen or panel according to claim 1, wherein said support is an amorphous carbon support having a thickness in the range from 100 μm to 3000 μm.

56.(new) A phosphor screen or panel according to claim 2, wherein said support is an amorphous carbon support having a thickness in the range from 100 μm to 3000 μm.

57.(new) A phosphor screen or panel according to claim 5, wherein said support is an amorphous carbon support having a thickness in the range from 100 μm to 3000 μm.

58.(new) A phosphor screen or panel according to claim 6, wherein said support is an amorphous carbon support having a thickness in the range from 100 μm to 3000 μm.

59.(new) A phosphor screen or panel according to claim 7, wherein said support is an amorphous carbon support having a thickness in the range from 100 μm to 3000 μm.